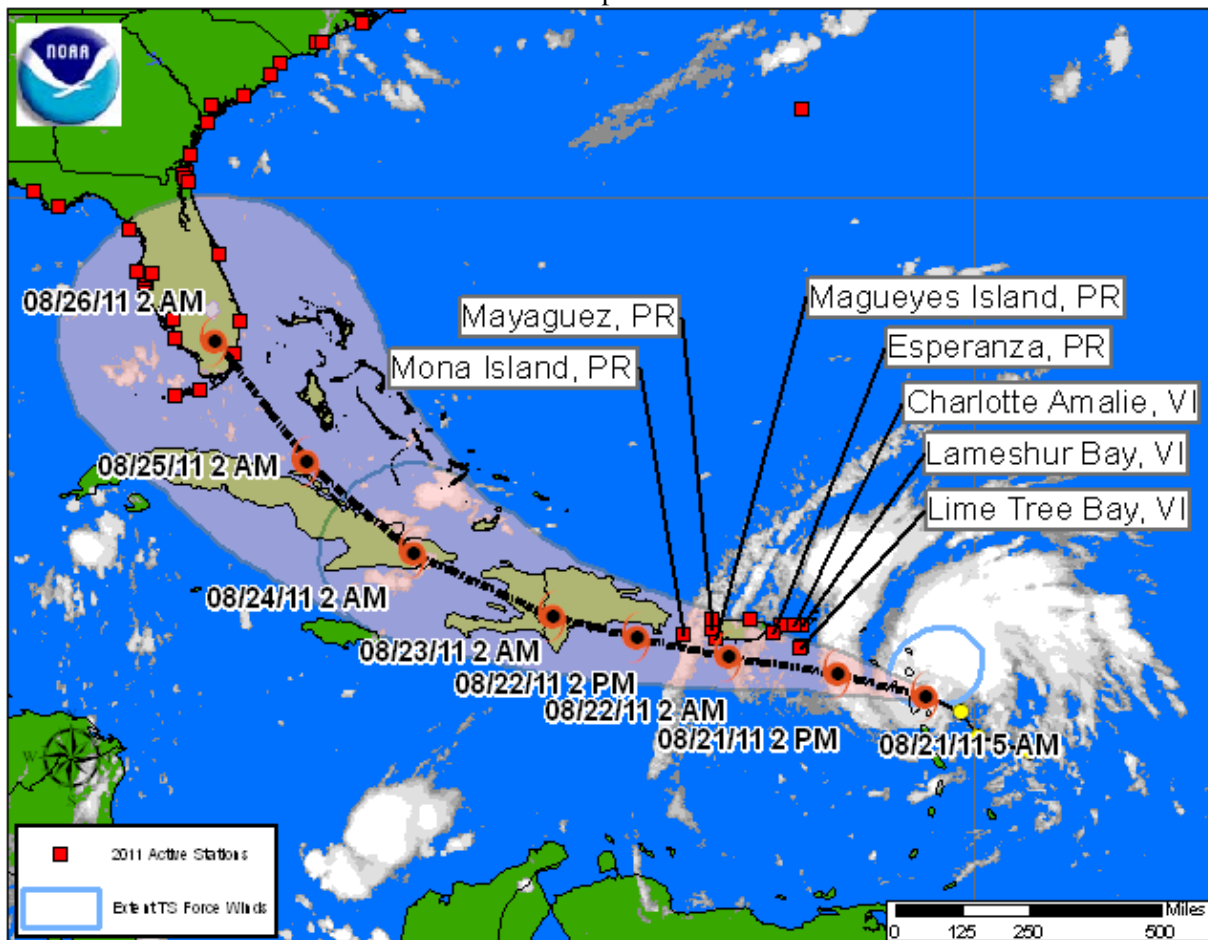




Tropical Storm IRENE QuickLook
Posted: 06:00 AST 08/21/2011

NOAA and NOAA Partnership Stations Relative to the Storm



Storm Analysis

As of 08/21/2011 06:00 AST, water levels in the U.S. Virgin Islands and Puerto Rico are slightly elevated at some stations, with Mayaguez, PR showing the most at .5m above predicted. Winds are gradually increasing in the region, with gusts up to 22 knots at Lime Tree Bay, VI. Barometric has begun falling across the region.

Water Level and Meteorological plots available below are updated automatically. Water level predictions relative to Mean Lower Low Water are:

Lime Tree Bay, VI Next predicted high tides are 0.76 ft (0.23 m) at 08/21/2011 19:55 AST and 0.82 ft (0.25 m) at 08/22/2011 20:20 AST.

Lameshur Bay, St. John, VI: Next predicted high tides are 0.7 ft (0.22 m) at 08/21/2011 16:49 AST and 0.8 ft (0.24 m) at 08/22/2011 17:48 AST.

Tropical Storm IRENE QuickLook, POSTED 06:00 AST 08/21/2011

Charlotte Amalie, VI Next predicted high tides are 0.81 ft (0.25 m) at 08/21/2011 17:25 AST and 0.87 ft (0.27 m) at 08/22/2011 18:18 AST.

Esperanza, PR Next predicted high tides are 0.63 ft (0.19 m) at 08/21/2011 18:27 AST and 0.70 ft (0.21 m) at 08/22/2011 19:12 AST.

Magueyes Island, PR Next predicted high tides are 0.76 ft (0.23 m) at 08/21/2011 19:48 AST and 0.82 ft (0.25 m) at 08/22/2011 20:14 AST.

Mayaguez, PR: Next predicted high tides are 0.8 ft (0.24 m) at 08/21/2011 15:26 AST and 0.5 ft (0.17 m) at 08/22/2011 02:59 AST.

Mona Island, PR Next predicted high tides are 0.80 ft (0.24 m) at 08/21/2011 20:40 AST and 0.85 ft (0.26 m) at 08/22/2011 21:23 AST.

For additional data, please see the [Center for Operational Oceanographic Products & Services](#) website. For information on Highest Astronomical Tide (HAT), NAVD88 and other datums, please see [Tidal Datums](#). For more information or archived products and reports, please see the [Storm QuickLook](#) Homepage.

Analyst:WFR

SELECT NATIONAL HURRICANE CENTER ADVISORY INFORMATION:

TROPICAL STORM IRENE ADVISORY NUMBER 3
500 AM AST SUN AUG 21 2011

...IRENE LASHING THE NORTHERN LEEWARD ISLANDS WITH SQUALLS AND
HEAVY RAINS...

WATCHES AND WARNINGS

A HURRICANE WATCH IS IN EFFECT FOR...
* PUERTO RICO...VIEQUES...AND CULEBRA

A TROPICAL STORM WARNING IS IN EFFECT FOR...
* PUERTO RICO...U.S. VIRGIN ISLANDS ...VIEQUES...AND CULEBRA

HURRICANE CONDITIONS COULD OCCUR ON PUERTO RICO...VIEQUES...AND
CULEBRA TONIGHT AND MONDAY MORNING.

A TROPICAL STORM WARNING MEANS THAT TROPICAL STORM CONDITIONS ARE
EXPECTED SOMEWHERE WITHIN THE WARNING AREA...IN THIS CASE WITHIN 24 TO 36
HOURS.

A TROPICAL STORM WATCH MEANS THAT TROPICAL STORM CONDITIONS ARE POSSIBLE
WITHIN THE WATCH AREA...IN THIS CASE WITHIN 36 TO 48 HOURS.

FOR STORM INFORMATION SPECIFIC TO YOUR AREA IN THE UNITED STATES... INCLUDING
POSSIBLE INLAND WATCHES AND WARNINGS...PLEASE MONITOR PRODUCTS ISSUED BY

YOUR LOCAL NATIONAL WEATHER SERVICE FORECAST OFFICE. FOR STORM INFORMATION SPECIFIC TO YOUR AREA OUTSIDE THE UNITED STATES...PLEASE MONITOR PRODUCTS ISSUED BY YOUR NATIONAL METEOROLOGICAL SERVICE.

DISCUSSION AND 48-HOUR OUTLOOK

AT 500 AM AST THE CENTER OF TROPICAL STORM IRENE WAS LOCATED NEAR LATITUDE 16.4 NORTH...LONGITUDE 61.3 WEST. IRENE IS MOVING TOWARD THE WEST NEAR 21 MPH AND A MOTION TOWARD THE WEST OR WEST-NORTHWEST AT A SLOWER RATE OF SPEED IS EXPECTED DURING THE NEXT 48 HOURS. ON THE FORECAST TRACK...IRENE WILL PASS THROUGH THE LEEWARD ISLANDS THIS MORNING...AND MOVE INTO THE NORTHEASTERN CARIBBEAN SEA THIS AFTERNOON. IRENE COULD APPROACH PUERTO RICO ON MONDAY.

MAXIMUM SUSTAINED WINDS ARE NEAR 50 MPH WITH HIGHER GUSTS. SOME STRENGTHENING IS FORECAST DURING THE NEXT 48 HOURS...AND IRENE COULD BECOME A HURRICANE BY MONDAY.

TROPICAL-STORM-FORCE WINDS EXTEND OUTWARD UP TO 150 MILES MAINLY TO THE NORTH AND EAST OF THE CENTER.

ESTIMATED MINIMUM CENTRAL PRESSURE IS 1006 MB

HAZARDS AFFECTING LAND

WIND...TROPICAL STORM CONDITIONS ARE EXPECTED IN THE LEEWARD ISLANDS LATER TODAY. TROPICAL STORM CONDITIONS ARE EXPECTED TO BEGIN THIS AFTERNOON IN THE VIRGIN ISLANDS AND PUERTO RICO. HURRICANE CONDITIONS ARE POSSIBLE OVER PUERTO RICO TONIGHT.

RAINFALL...IRENE IS EXPECTED TO PRODUCE TOTAL RAINFALL ACCUMULATIONS OF 4 TO 7 INCHES IN THE LEEWARD ISLANDS...PUERTO RICO AND THE VIRGIN ISLANDS...WITH ISOLATED MAXIMUM AMOUNTS OF UP TO 10 INCHES. THESE RAINS COULD CAUSE LIFE-THREATENING FLASH FLOODS AND MUDSLIDES IN AREAS OF STEEP TERRAIN.

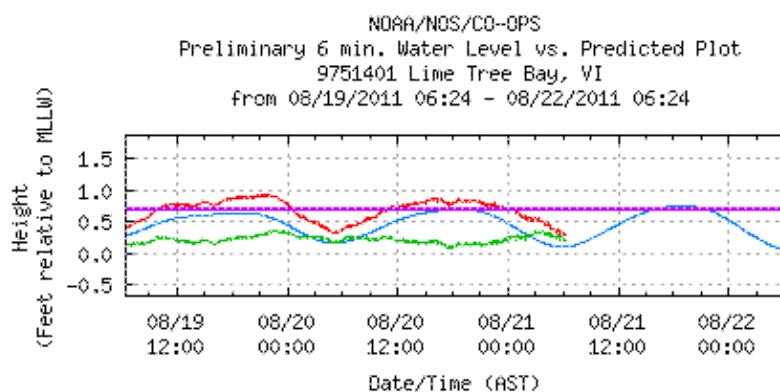
STORM SURGE...A STORM SURGE WILL RAISE WATER LEVELS BY AS MUCH AS 3 TO 5 FEET ABOVE NORMAL TIDE LEVELS ALONG THE SOUTHERN COAST OF THE DOMINICAN REPUBLIC. A STORM SURGE OF 1 TO 3 FEET ABOVE NORMAL TIDE LEVELS IS EXPECTED ALONG THE IMMEDIATE COAST IN THE TROPICAL STORM WARNING AREA. NEAR THE COAST...THE SURGE WILL BE ACCOMPANIED BY LARGE AND DANGEROUS WAVES.

FORECASTER STEWART

For the purpose of timely release, data contained within this QuickLook have undergone a "limited" NOS Quality Assurance/Control; however, the data have not yet undergone final verification. All data subject to NOS verification.

Jump to: [Lime Tree Bay - Water Level](#), [Lime Tree Bay - Winds](#), [Lime Tree Bay - Barometric](#), [Lime Tree Bay - Air/Water Temp](#), [Lameshur Bay, St. John - Water Level](#), [Lameshur Bay, St. John - Barometric](#), [Lameshur Bay, St. John - Air/Water Temp](#), [Charlotte Amalie - Water Level](#), [Charlotte Amalie - Barometric](#), [Charlotte Amalie - Air/Water Temp](#), [Magueyes Island - Water Level](#), [Magueyes Island - Winds](#), [Magueyes Island - Barometric](#), [Magueyes Island - Air/Water Temp](#), [Mayaguez - Water Level](#), [Mayaguez - Winds](#), [Mayaguez - Barometric](#), [Mayaguez - Air/Water Temp](#), [Mona Island - Water Level](#),

Lime Tree Bay, VI - Return to List



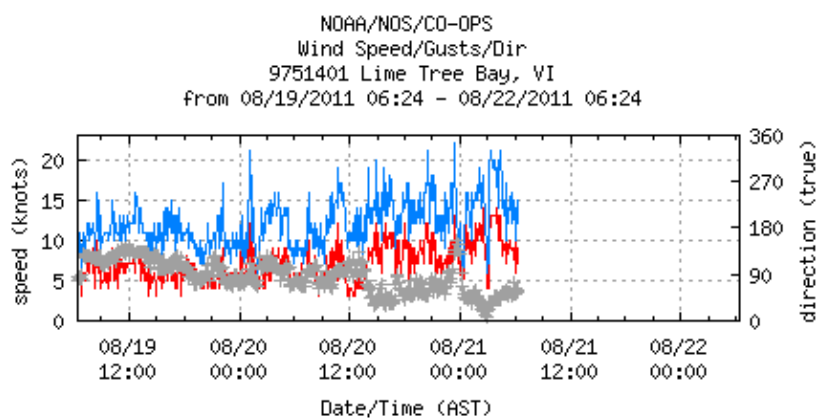
Predicted WL — (Obs-Pred) —
Observed WL — MHHW —

Last Observed Sample: 08/21/2011 06:18 (AST)

Relative to MLLW: **Observed: 0.31 ft.** **Predicted: 0.10 ft.** **Residual: 0.21 ft.**

Historical Maximum Water Level: Nov 17 1999, 1.88 ft. above MHHW

Lime Tree Bay, VI - Return to List

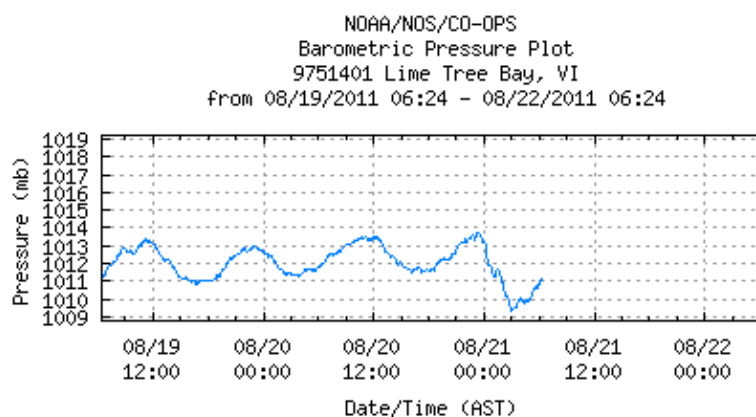


speed — gusts — direction +

Last Observed Sample: 08/21/2011 06:18 (AST)

Wind Speed: 9 knots **Gusts: 15 knots** **Direction: 59° T**

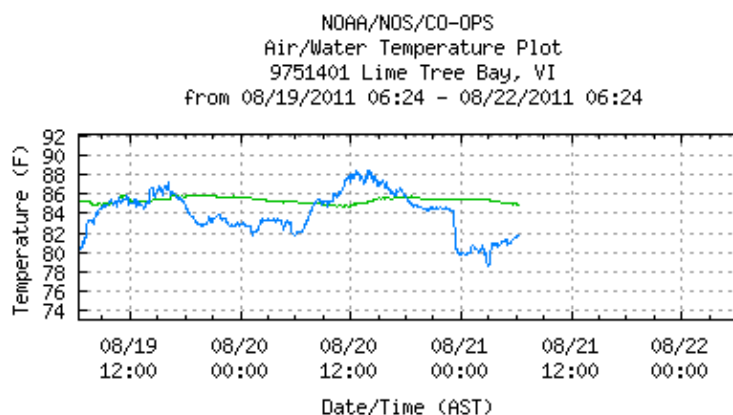
[Lime Tree Bay, VI - Return to List](#)



Last Observed Sample: 08/21/2011 06:18 (AST)

Barometric Pressure: 1011.2 mb

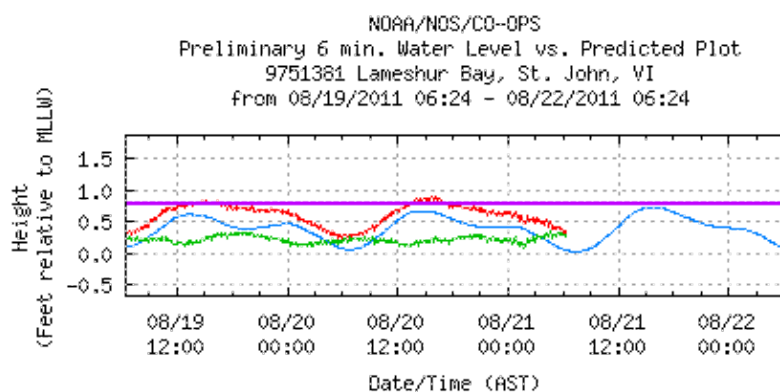
[Lime Tree Bay, VI - Return to List](#)



Last Observed Sample: 08/21/2011 06:18 (AST)

Water Temperature: 84.9° F Air Temperature: 81.7° F

Lameshur Bay, St. John, VI - Return to List



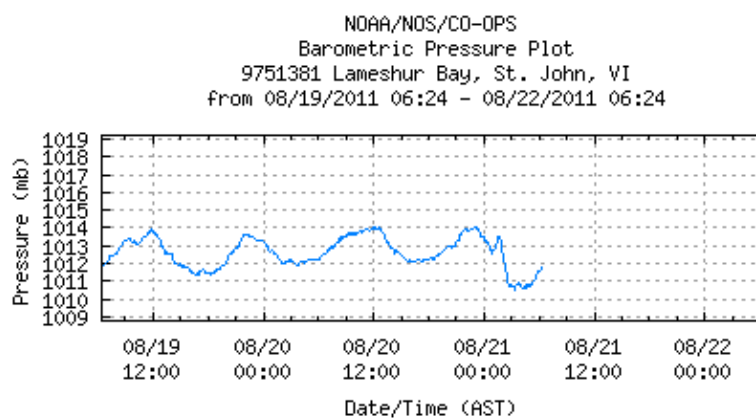
Predicted WL — (Obs-Pred) —
Observed WL — MHHW —

Last Observed Sample: 08/21/2011 06:18 (AST)

Relative to MLLW: **Observed: 0.30 ft.** **Predicted: 0.05 ft.** **Residual: 0.25 ft.**

Historical Maximum Water Level: Aug 30 2010, 0.9 ft. above MHHW

Lameshur Bay, St. John, VI - Return to List

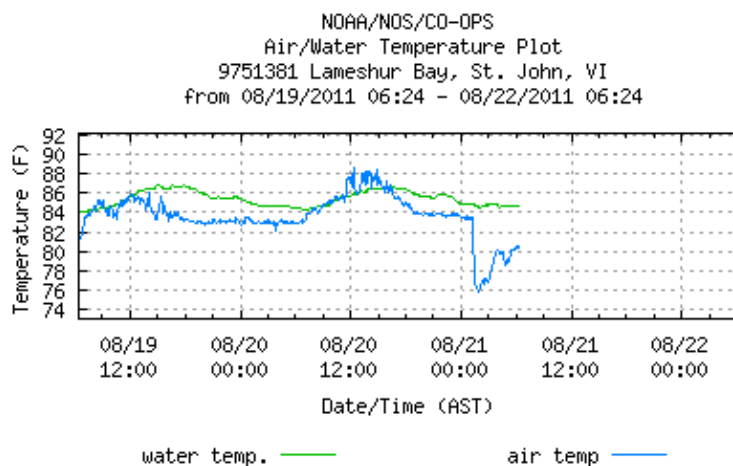


barometric pressure —

Last Observed Sample: 08/21/2011 06:18 (AST)

Barometric Pressure: 1011.8 mb

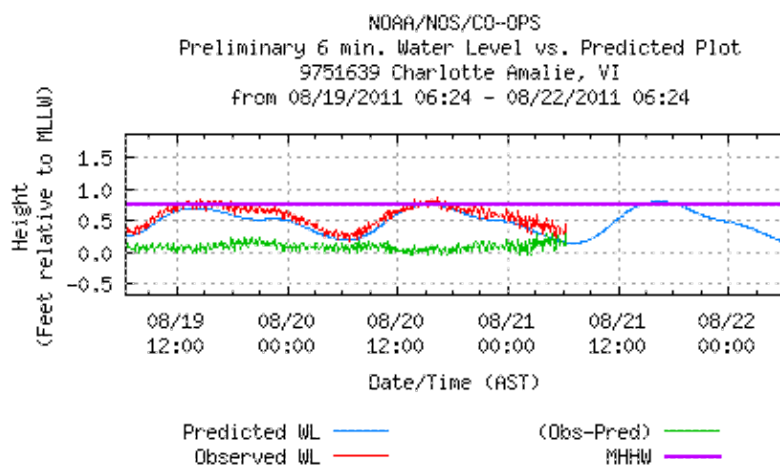
Lameshur Bay, St. John, VI - Return to List



Last Observed Sample: 08/21/2011 06:18 (AST)

Water Temperature: 84.7° F Air Temperature: 80.6° F

Charlotte Amalie, VI - Return to List

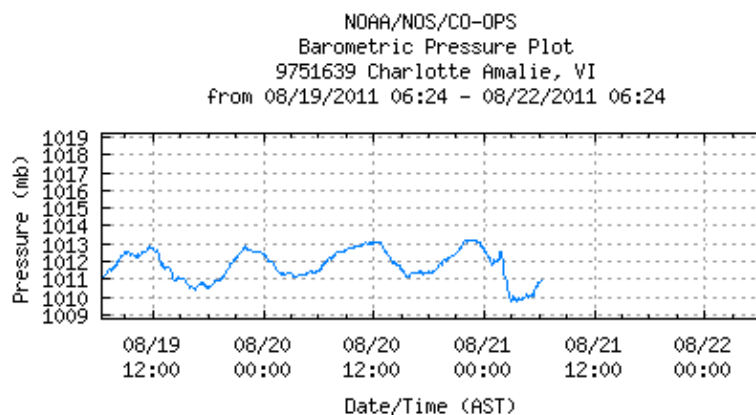


Last Observed Sample: 08/21/2011 06:18 (AST)

Relative to MLLW: Observed: 0.44 ft. Predicted: 0.15 ft. Residual: 0.29 ft.

Historical Maximum Water Level: Sep 16 1995, 2.93 ft. above MHHW

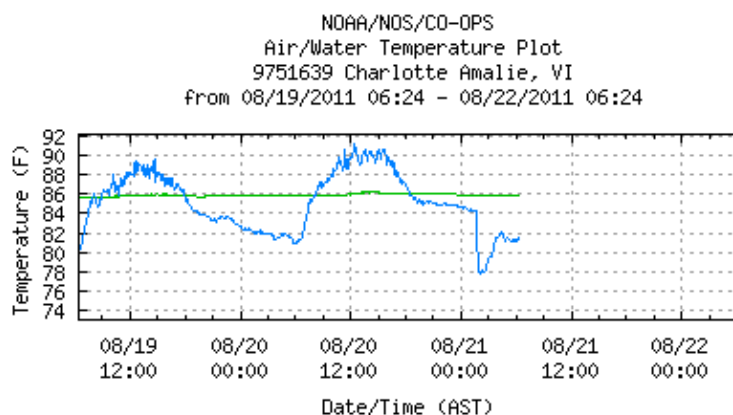
[Charlotte Amalie, VI - Return to List](#)



Last Observed Sample: 08/21/2011 06:18 (AST)

Barometric Pressure: 1010.9 mb

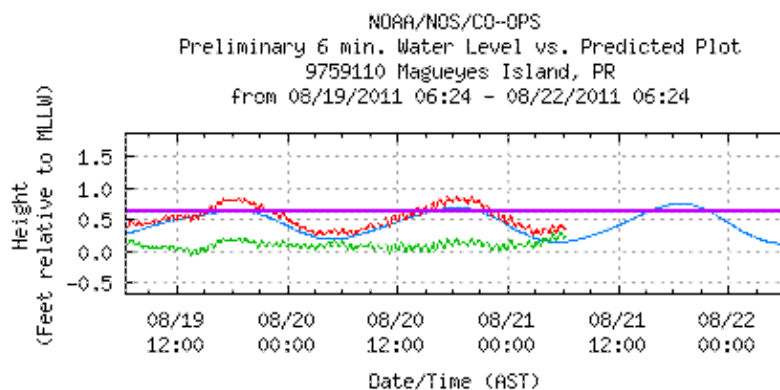
[Charlotte Amalie, VI - Return to List](#)



Last Observed Sample: 08/21/2011 06:18 (AST)

Water Temperature: 85.9° F Air Temperature: 81.5° F

Magueyes Island, PR - Return to List



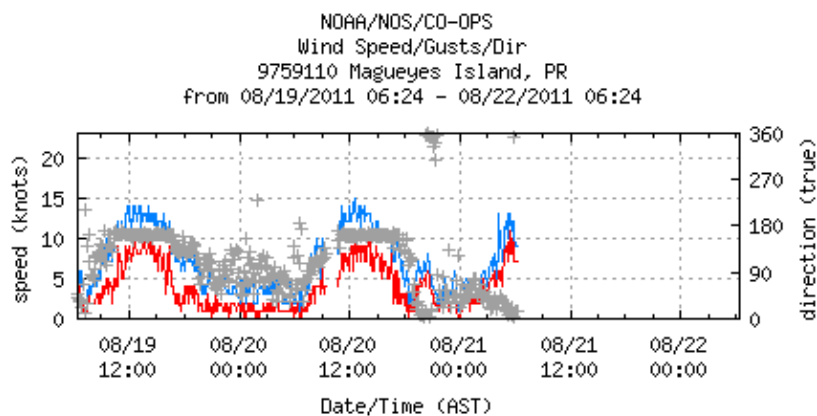
Predicted WL — (Obs-Pred) —
Observed WL — MHHW —

Last Observed Sample: 08/21/2011 06:18 (AST)

Relative to MLLW: **Observed: 0.38 ft.** **Predicted: 0.15 ft.** **Residual: 0.23 ft.**

Historical Maximum Water Level: Sep 22 1998, 1.6 ft. above MHHW

Magueyes Island, PR - Return to List



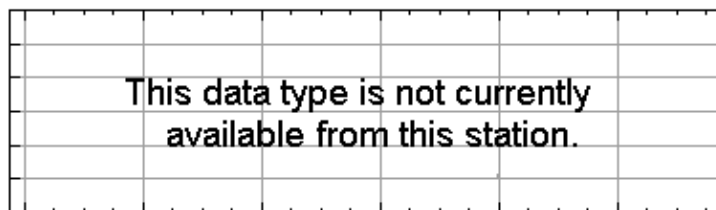
speed — gusts — direction +

Last Observed Sample: 08/21/2011 06:18 (AST)

Wind Speed: 7 knots **Gusts: 9 knots** **Direction: 4° T**

Magueyes Island, PR - Return to List

NOAA/NOS/CO-OPS



Last Observed Sample: 08/21/2011 06:18 (AST)

Barometric Pressure: 1011.7 mb

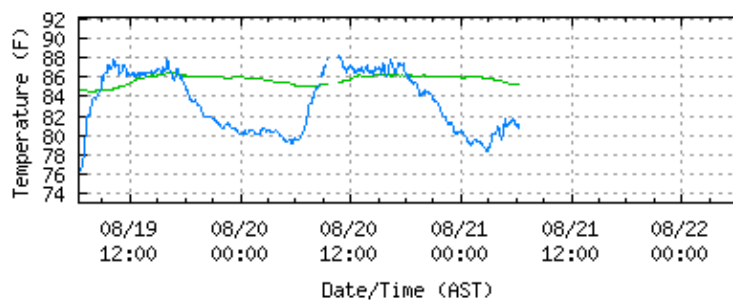
Magueyes Island, PR - Return to List

NOAA/NOS/CO-OPS

Air/Water Temperature Plot

9759110 Magueyes Island, PR

from 08/19/2011 06:24 - 08/22/2011 06:24

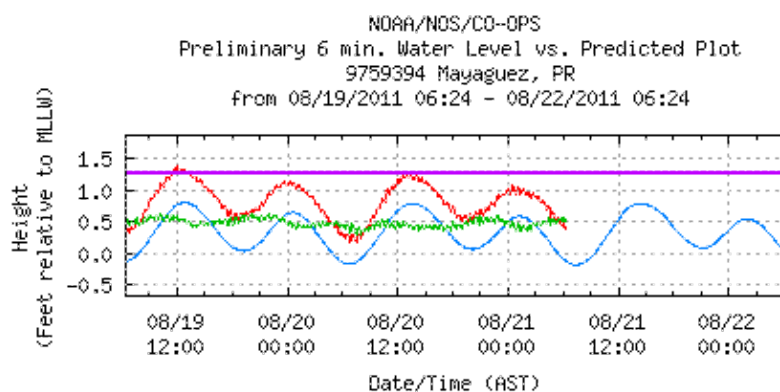


water temp. — air temp. —

Last Observed Sample: 08/21/2011 06:18 (AST)

Water Temperature: 85.3° F Air Temperature: 80.8° F

[Mayaguez, PR - Return to List](#)

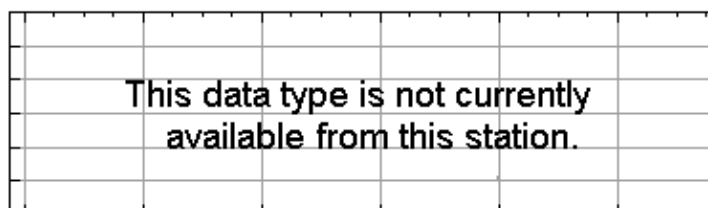


Predicted WL — (Obs-Pred) —
Observed WL — MHHW —

Last Observed Sample: 08/21/2011 06:18 (AST)
Relative to MLLW: **Observed: 0.41 ft.** **Predicted: -0.12 ft.** **Residual: 0.53 ft.**
Historical Maximum Water Level: , 0 ft. above MHHW

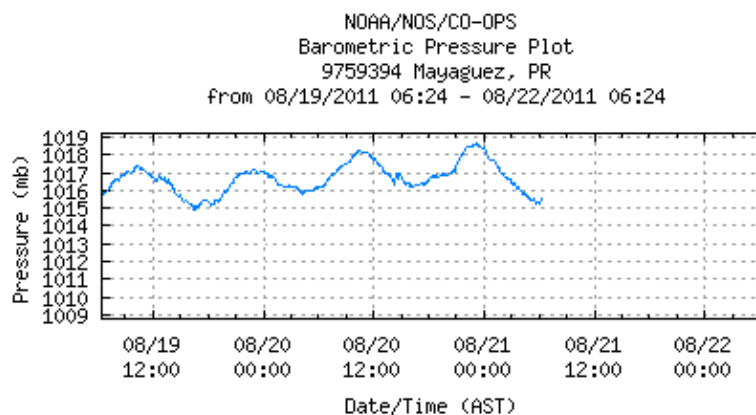
[Mayaguez, PR - Return to List](#)

NOAA/NOS/CO-OPS



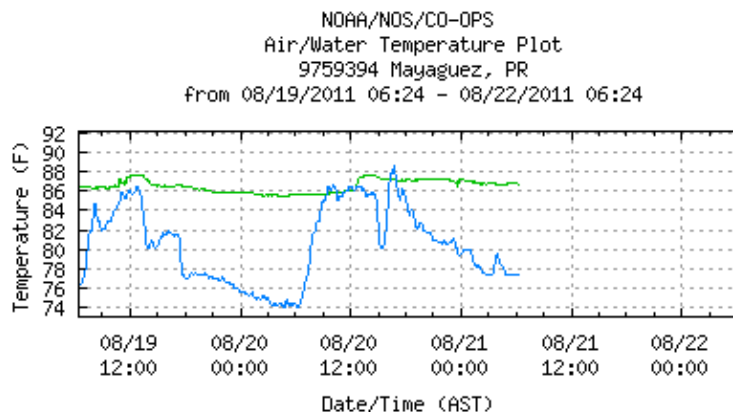
Last Observed Sample: 08/21/2011 06:18 (AST)
Wind Speed: 2 knots **Gusts: 3 knots** Direction: 89° T

[Mayaguez, PR - Return to List](#)



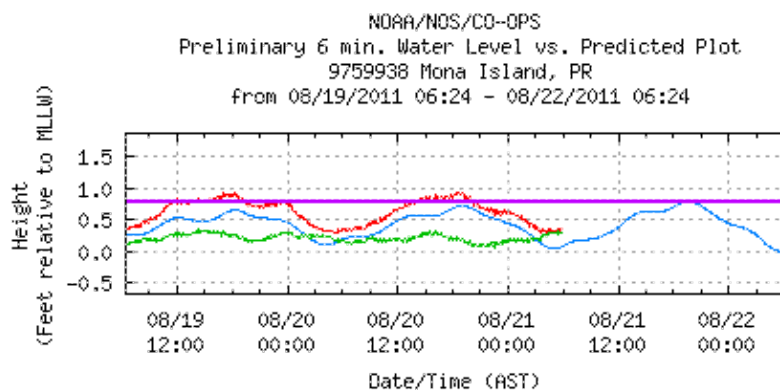
Last Observed Sample: 08/21/2011 06:18 (AST)
Barometric Pressure: 1015.6 mb

[Mayaguez, PR - Return to List](#)



Last Observed Sample: 08/21/2011 06:18 (AST)
Water Temperature: 86.7° F Air Temperature: 77.5° F

[Mona Island, PR - Return to List](#)



Predicted WL — (Obs-Pred) —
Observed WL — MHHW —

Last Observed Sample: 08/21/2011 05:54 (AST)

Relative to MLLW: **Observed: 0.35 ft.** **Predicted: 0.07 ft.** **Residual: 0.28 ft.**

Historical Maximum Water Level: Dec 23 2010, 1.26 ft. above MHHW

Center for Operational Oceanographic Products & Services (CO-OPS) | National Ocean Service (NOS)
National Oceanic and Atmospheric Administration | U.S. Department of Commerce